A Review of Differences and Similarities in the Drawing Practices of Graphic and Textile Designers

A REVIEW OF DIFFERENCES AND SIMILARITIES IN THE DRAWING PRACTICE OF GRAPHIC AND TEXTILE DESIGNERS

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ABSTRACT

Recent opportunity to work closely with textile designers and educators has lead to a significant addition to the author's long-term research program conducted since the mid 1980s into the role of drawing for design. This program was initially concentrated on graphic design but, in the latest phase of research, presented below, the role of drawing in textile design has been investigated in sufficient depth to facilitate comparative analysis with the findings for graphic design previously established.

Textile designers described a greater dependency on drawing than graphic designers, with the visual awareness needed to draw from observation and the visual literacy needed to copy and interpret archive material being deemed essential. While, for both professions, many similarities were indicated in the use of drawing in the design process, textile designers also need the drawing ability to create both decorative qualities and detailed technical specifications for production.

Keywords: Drawing, Graphic Design, Textile Design

INTRODUCTION

In several key respects there are similarities between the graphic and textile design processes. Both are necessarily responsive to the influence of fashion trends and have to operate effectively within the time constraints of industry. In addition, both have undergone major change due to technological developments. Moreover, and particularly relevant to the topic of this paper, both are substantially image-based. In this present study, the drawing practices of both graphic and textile designers have been investigated and compared, and the key findings are presented herein.

The author's longitudinal research program, initiated in the mid-1980s (Schenk 1991), has examined the role of drawing in graphic design and monitored the changes due to technical development and other factors in the intervening period. In 2004 the study was extended to include textile and three-dimensional design, but it has only been in the last year, while conducting research in the School of Textiles and Design, Heriot-Watt University, that the opportunity for the author to work closely with textile designers and educators has led to findings for textiles comparable in depth to those previously achieved for graphics.

The terms 'graphic design' and 'textile design' have very broad-based connotations. For the purpose of the longitudinal study, the term 'graphic design' has been used to denote a wide range of professional design activities including promotion, packaging, corporate identity design, advertising and publishing, with multimedia and web-design being added as the study progressed. In the most recent investigation the term 'textile design' has been used to include, specifically, design for knit, print and weave. However, opinion from representatives of fashion courses and the academic managers of textile

courses consulted in the 2004 phase of the study have also been re-evaluated for this paper.

By a comparison of data from the still ongoing study of graphic design and from this new investigation conducted with textile designers, the different roles of drawing in the respective design processes and in the working practices of designers have been identified. The role of drawing in developing visual awareness and visual literacy, and its role in the various stages of the design process, have been compared, and the different emphasis put on drawing from observation and copying has been investigated in relation to the relative importance of originating or repurposing imagery in each discipline.

RESEARCH METHODS

The majority of the findings about the role of drawing in textile design presented in this paper have been collected since January 2011, while those used to make the comparison with graphic design were collected over a period of six years up to 2011. Findings and discussion from an earlier study conducted in 2004 (Schenk 2005), when the opinion of 40 senior academics were elicited, are also referred to where relevant.

The initial stimulus for this new piece of work came with the setting up of the Drawing Research Group (DRG) in the School of Textiles and Design, Heriot-Watt University, when in-depth discussion on the role of drawing in textile design was initiated and the author became aware that a valuable addition to her work was indicated. The investigation began with the construction of an eight section topic-based series of queries, termed *e-questions,* in the form of a questionnaire administered at regular intervals through email to the DRG members. This led to initial detailed individual accounts of the role of drawing in textiles which the author was able to explore more thoroughly through further investigation. While interviewing expert practitioners has hitherto proved the most effective way for the author to gain insight into drawing for the design processes, time constraints could cause limitations in the depth of understanding elicited. In contrast the seven members of the DRG, representing senior academics with extensive industrial experience and with an established interest in drawing, responded over a period of several months and in considerable detail, thereby providing a sound basis for the new investigation.

The research methods subsequently adopted for the further investigation of the role of drawing in textile design were in many respects similar to those used in the ongoing research into graphic design to facilitate comparability, and they included semi-structured interviews, observation of studio and workshop practice, and the analysis of drawings. The author has found that interviewing designers proves an effective way of eliciting both their personal approach to drawing and their experience of the requirements of working for industry. Using a semi-structured technique, an interview can combine consistent investigation of predetermined topics with the opportunity to explore new lines of enquiry (Gray and Malins, 2004). Observation of designers within their working environment also proved an effective means of identifying drawing practices and, similarly, the analysis of drawings, particularly with the respondent present, yields still further information. Where possible, the recent round of interviews and discussions were conducted at the respondent's place of work, where the activity of drawing could be witnessed and where examples of drawings were available for reference and close examination.

A total of 29 respondents, 19 senior academics and 10 masters course and final year undergraduate students contributed to the investigation into textiles design and 20 graphic design practitioners were selected from those most recently interviewed

for comparison purposes. However, it should also be noted that, particularly with regard to the classification of drawing use and types, many of the findings previously made in regard to the development of the taxonomy referred to below have had an impact on the conduct of this research and have informed the contextualization process, thereby extending the number of respondents who have contributed to the theoretical basis of the recent research.

There can be no analysis without classification and so, at an early phase of this longitudinal study, a system of classification of drawings was established to define the uses of drawing in the design process and the types of drawing produced for each stage (Schenk, 2007). The 'taxonomy' thereby developed has provided a basis for analysis, from which forms of drawing and types of drawings new to the study have been identified and characterized.

In all, the views of some hundreds of designers and over a hundred academics, plus those of numerous students, have been elicited during the longitudinal study, in addition to which, well over a thousand drawings have been analyzed and studio practice has been monitored over a 25 year period.

DRAWING, VISUAL AWARENESS AND VISUAL LITERACY

Initial findings indicated that it was necessary to make a distinction between *visual awareness* and *visual literacy* when eliciting the views of both graphic and textile designers. Here, the term *visual awareness* is defined by the author as 'being alert to visual qualities', and *visual literacy* is defined as 'being alert to the historical style or to the meaning of images'. Interestingly, during the interviews, one textile designer defined *visual awareness* as being "the degree that one observes detail and the ability to recall and record with accuracy." This, she claimed, can be developed by looking and carefully observing and evaluating current and past imagery, and drawing is an excellent way to help improve visual awareness. She went on to define *visual literacy* as "the knowledge and visual language…. that an individual has acquired through past experiences," going on to say that it is "developed by gaining knowledge through the practice of observing and analyzing current and historic imagery". This capacity to observe, analyze and record historical material through drawing is demonstrated in Figure 1, where a range of drawings and other forms of notation have been made in a notebook to record both visual and technical information from a specialist archive.

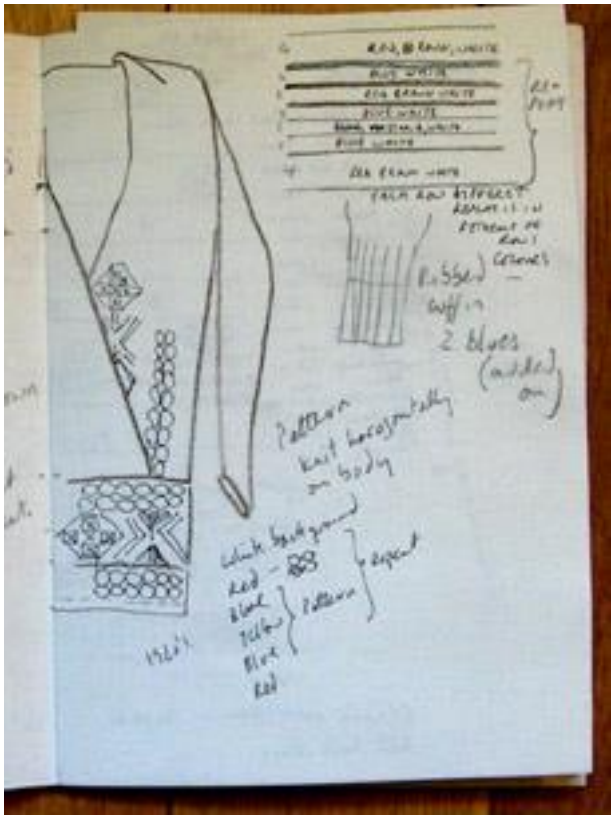

Figure 1. Drawing to analyze a Shetland Archive. Sarah Dearlove, 2011

Graphic designers generally demonstrated more interest in *visual literacy* than *visual awareness,* indicating that it was not only the *visual literacy* of designers but also of clients and end-users that was important, especially with complex and sophisticated media like web-design. As one designer put it "they have to be able to read it". Typically pragmatic,

when asked how visual literacy is developed, a managing director of a successful print and web design agency said "You immerse yourself on the internet in what other designers are doing; it's important to understand current trends, people's expectations of *now*." As the creative director of the same company said, "Everything is moving quicker now – quicker and quicker", expressing the competitive urgency to be current that typified the graphic designers interviewed. Interesting analysis has been made of the way designers develop their visual awareness and literacy and of the relative importance of these (Crow, 2003). While textile designers describe drawing from observation as a way to develop their visual awareness of texture, pattern and form, few graphic designers described this as important. However, quick sketching and copying pictures from books and prints, etc. to collect visual data was described as a way of developing visual literacy.

While designers from both disciplines admitted that pressure of work could minimize the amount of time given to drawing for collecting visual reference, it was observed that the use of archives and found imagery plays a very important part in their work. As a textile print designer indicated, "There are two different ways I would make the choice of archive or visual source material. The first is to fulfill a trend or specific design genre…….The second approach is purely inspirational. It could be a piece of fabric, or ceramic, etc., that I see and I like, and so I want to draw it".

DRAWING FOR DECORATIVE AND FLORAL DESIGN

The importance of responsiveness to decorative effects was consistently referenced by textile designers, while no such interest was described by graphic designers, for whom drawing for communication predominates. However, the ability to draw to achieve aesthetic and, in particular, stylistic qualities is seen as very significant by graphic designers, and an affectionate evocation of the decorative elements of historical graphic imagery was frequently cited as a valuable and personally gratifying exercise.

The descriptions that textile designers gave of their drawing for decoration shared a number of common characteristics, with terms like 'pattern', 'repeat' and 'rhythm' predominating. When describing drawing for inspiration, a knitwear designer said that she might "record decorative design qualities to break down pattern blocking and color" as is demonstrated in Figure 2.

Figure 2. Exploring color and pattern for a knitwear collection. Sarah Dearlove, 1998

Another knitwear designer described his "rhythmic observations", looking at the harmony of shape and geometry of components, producing drawn elements that occur again and again. Perhaps more

pragmatically, a textile print designer indicated that drawing for decoration is essentially about consistency. "It has to work as a flat print. Even with the new technology, textile design has still a lot in common with the old block and screen methods. Printed by the mile, it has to be all the same."

The phenomena of drawing for the design of floral patterns, while still highly significant to textile design, has no real equivalent for graphic designers, with the possible exception being the practice of drawing from photographic imagery. The particular range of drawing skills needed for the development and production of 'florals' is also rather specific to textile designers, with several describing acquiring the skills of drawing flowers as a major part of their study while at art school. "For me, it is initially a desire to understand the form of the flowers; how they look from different angles, and against different backgrounds," indicated one weave designer.

A well-informed capacity to select when drawing from textile archives is also particularly important. "The key for me is to gather specific information from that source, or species of flower, etc. On the whole my furnishing fabric designs are about producing floral information for the market" is how another well-established printed textile designer refers to his ability to access and exploit textile archives effectively. The ability to interpret a trend through drawing is also vital, the same designer going on to say that, "I think there is also a point about the impression of the floral at any particular time which is to do with market and trend factors. Therefore if I am to draw the same species of flower at a different date I would react differently to recording the information."

DRAWING FROM OBSERVATION AND COPYING

In the words of a head of department on the vital importance of learning about drawing in the education of jewellery designers, "Drawing is about how you see the world. If you want to really see something you draw it." For the textile designers included in this study, drawing from observation was a crucial part of their education and this type of drawing is still encouraged on textile design courses to a greater degree than on communication design courses (Schenk, 2005). A head of a department of weave was memorably eloquent when interviewed about the drawing education of her students, describing the setting up of a still life wall with a wide range of textured materials from which students could learn to draw from observation, but working from abstract forms, thereby encouraging their concentration on achieving decorative qualities. Indeed, exploring the point where accuracy meets expression was described as a significant transition by textile designers, where subject, marks and media converge and collectively communicate a visual energy. However, as generally agreed, this synthesis through drawing is only possible after sustained practice. Figure 3 shows a final year print student's drawings when working from observation to explore decorative effects.

Figure 3. Drawing from observation to explore decorative effects for print. Johanna Fleming, 2011

The type of accuracy sought was also described as definitely not being a photographic, super-real type of accuracy, but as the need to start with the intention of being true to the subject matter. "If I

am drawing from observation, and taking time to look and search for information, then I would want to have some degree of accuracy in the drawing" responded a print designer equally convinced of the importance of drawing to his work. Indeed there was a general level of agreement among textile designers that exploring through drawing is very important, i.e. getting absorbed in the activity of drawing, or "imprinting a response through the experience of looking" as one described it.

Many of the graphic designers included in the study had also been influenced by drawing from observation in their formative years and several continue to draw from observation for the purpose of self-development (Schenk, 1991), but it is clear that this type of drawing does not have the same intrinsic role in their current practice as it does for the textile designers. However the use of copying in its various forms is crucial to both kinds of practice and the differences in its application forms an interesting area of comparison.

The historical importance of copying in the education and professional development of artists and designers is well described in the literature. (Bell, 1963, Drew and Harrison, 1987, Petherbridge, 2010). A director of design studies summarized some of the problems inherent in the current confusion about the role of copying for today's student designers, saying that "Copying need not be seen as either fake or plagiarism. Student designers have a deep anxiety about originality which can put them in a kind of 'Ivory Tower' when, in reality, authorship is generally collective".

Along with many of the respondents in the study, he believes that students should still be encouraged to copy as a way of analyzing source imagery and in order to develop an interest in the language of image making. "It is healthy and liberating for students to understand the construction of other designers' work through copying it" was also a claim made by another respondent. In fact, an interesting range of attitudes towards the relative merits of various forms of copying, interpreting and seeking inspiration from archive material for their professional work is expressed by both graphic and textile designers.

To textile designers, copying is the direct link to collecting visual information from archive material. For example, copying may simply be a technical exercise to source vintage reference material for print. The use of archive material is very important and awareness of the current market essential, and copying is a skill developed to investigate both. For a graphic designer copying is not plagiarism but *fusion*. "We acknowledge the importance of using visual reference so long as you don't see the original source in the image" was the way a course director for visual communication described the process. However, one of the major differences between graphic and textile designers is in their choice of visual sources. Instead of the well-established reference to archive material of textile designers, graphic designers tend to describe their use of on-line stock images. "If, for example you want a picture of a guy standing next to a car, search Google." Such images may be collected from a number of sources using, for example, Zootool, and then modified by various forms of drawing for the evaluation of a design solution and, if necessary, purchased for a final design. Stock photographs may be bought and modified in various ways like printing, tracing and scanning or by working with, for example, the Wacom tablet directly with the downloaded image.

Given the availability of digital sources of imagery and archive material, much is in fact repurposed by graphic designers through digital means, whereas many textiles designers express themselves keen to preserve their practice of drawing from archives.

The importance of actually 'drawing for repeat' as opposed to copying and 'flipping' digitally is of particular importance to some textile designers and can be seen in examples of their drawings, such as in Figure 4 where a weaver is working in pencil to plan a repeat.

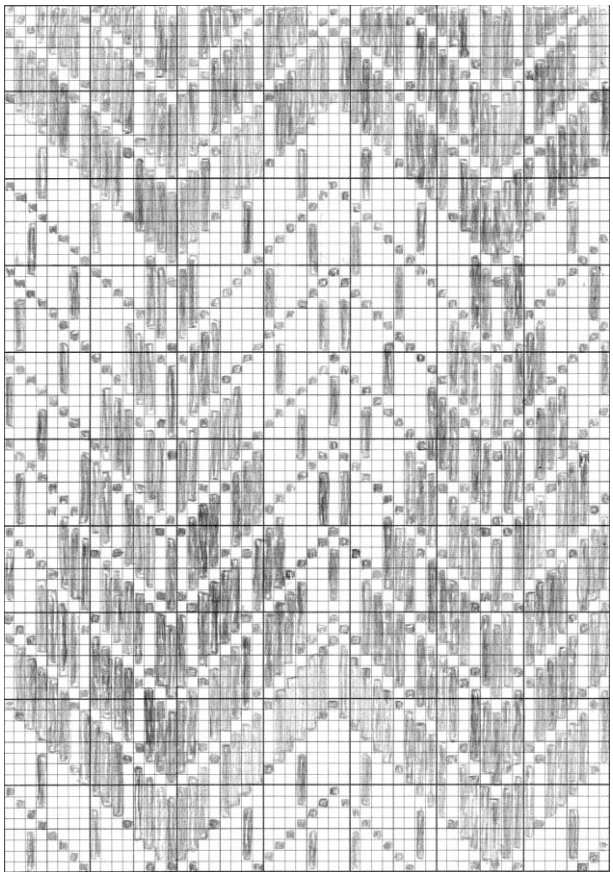

Figure 4. Pencil drawing to plan digital weave repeat. Ruth Walker 2011

Interestingly, graphic design academics have described copying for rendering letterforms as an effective way of introducing students to the various qualities of typefaces, one saying "Tracing from type is less of a requirement now but this may be a loss". However, the more profound need to "learn about the psychology of transformation through drawing" was also described by a graphic designer with a particular interest in illustration. While relying on the speed and convenience of the internet to source visual reference material, graphic designers' awareness of the historical and semantic aspects of repurposed graphic images is seen as an important part of their professionalism, just as it is seen as vital that anxious or lazy students are not allowed to rely on the digital short cuts that undermine creative development.

DRAWING IN THE DESIGN PROCESS

Textile designers use drawing consistently throughout the design process and, it would appear, given the findings of this study, to a greater degree than graphic designers. However for key parts of the development of a design solution, particularly for ideation and conceptualization, all the designers included in the study confirmed their use of drawing. "Everything starts with drawing because it's so instant and sketches are disposable" indicated an art director who emphasized the value of using traditional drawing methods, particularly in the development of ideas, as drawing digitally can be limiting and time consuming. "You can't do things like turn the paper or try out ideas quickly". In Figure 5 this kind of sketch, quickly produced but full of information can be seen.

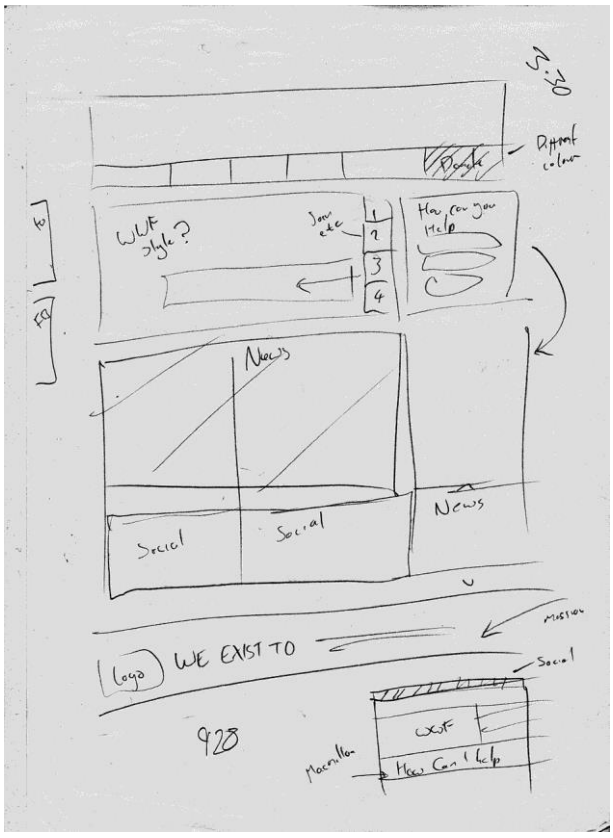

Figure 5. Sketch for a web-page. Allan Wellburn, 2011

Indeed, there are many broad similarities in the use of drawing in all the stages of the design process. Both groups stressed the significance of the briefing sessions with the client and of getting a good level of agreement of the client's needs. In an early phase of the longitudinal study it was found that some graphic designers were cautious about drawing at a briefing, particularly when indicating ideas for solutions, as this could make the design process look easy, or they were concerned that their weak drawing skills would make them seem unprofessional. Similarly, in a more recent round of interviews a graphic designer said that in briefing sessions "You draw for yourself, so you hide it away". It is necessary to appear assured in front of the client.

Maintaining a controlled approach during briefing is also important for textile designers working for big industrial clients. This stage is primarily based on written notes, found images, or the designer's own photographs brought together in mood-boards or story-boards. This selection of visuals is used to set the design process in motion, with some sketches being produced to support discussion. Again, with both groups, in more informal briefing sessions, especially with clients well known to the designer, or where the designer is a confident draughtsman, some design solutions will be talked through and agreed by the use of drawing.

A spontaneous yet competent use of both traditional and digital drawing methods can facilitate the progression through the design process from first ideas to the resolution of a design solution. For example, a student textile designer described her work on a final year project, moving through the ideation stages from collecting visual reference material by referencing her existing collection of sketches, developing ideas with "quick fast marks generating lots of paperwork", then scanning-in through Photoshop to edit the ideas, at which stage "I cut a lot of my work down to get it more focused" However for a professional designer the ideas and concept development stage is most crucial and can be very concentrated and extended, "drawing for this stage being long and drawn out as one goes through all the design ideas coming out of the briefing that are then broken down into design options".

The informality of the type of drawing activity to support ideation is confirmed by both discipline groups describing the production of similar types of drawings, for example "scribbly initial ideas on cheap A4 paper or in a notebook". The drawing itself is quite quick and intuitive as ideas are processed on paper to see if they are workable. Evaluation and revision are also important stages of the process where similarities in the use of drawing occur, invariably requiring the presentation of ideas in a form to communicate to others. Figure 6 shows this kind of development.

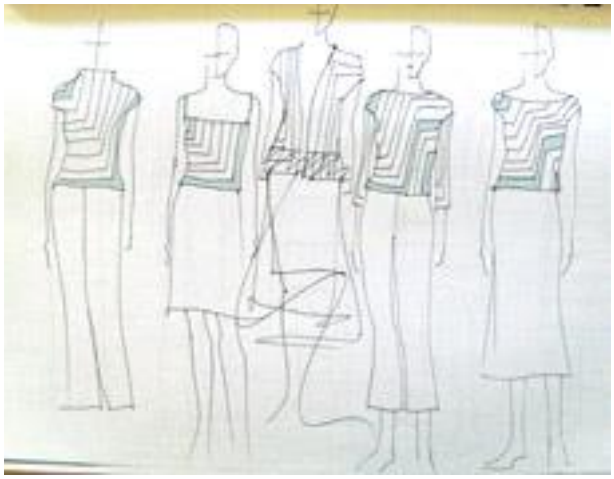

Figure 6. Presentation drawing for a Knitwear collection. Sarah Dearlove, 1999

"We sketch ideas for clients by giving them a wire frame in a form that the client can read", indicated one web designer. At this same stage, textile designs might be also be selected with the client and re-drawn or developed further for them to arrive at a conclusive selection.

Controlling the production process, while being emphasized as important by both groups, tends to be

handled rather differently. Although there were respondents from both groups who described the importance of specification drawings, the textile designers, and particularly those in constructed textiles, stressed the importance of producing accurate, detailed drawn specifications, as shown in Figure 7, in order to ensure that the production process would be as efficient and effective as possible.

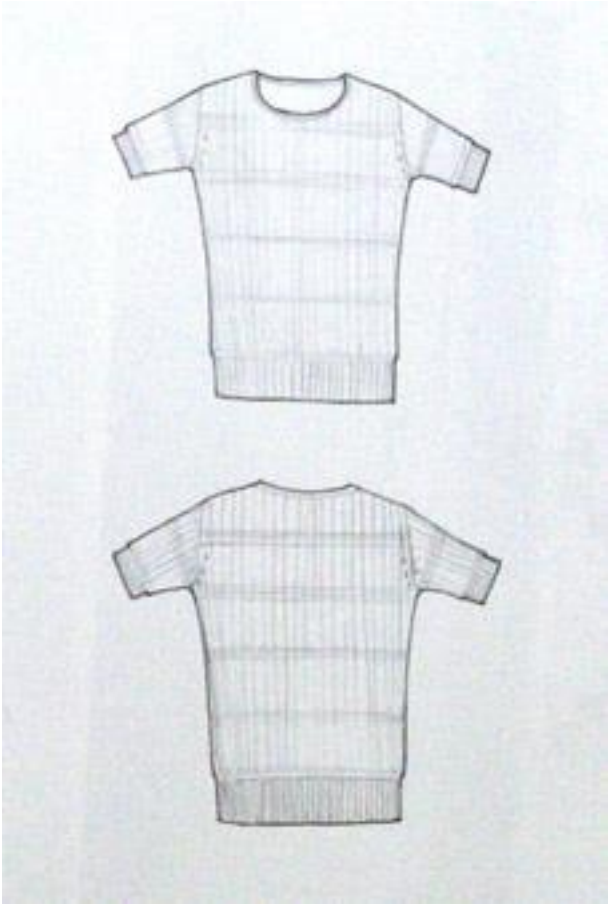

Figure 7. Specification drawing for knitwear. Sarah Dearlove, 2010.

Indeed, there are dangers inherent in not doing so in an industry largely reliant on free-lance designers who may not be on hand at the time of production. Graphic designers, however, who are generally more in control of the production process themselves, use specification drawings to brief illustrators or photographers and again see accuracy of paramount importance.

Observation of textile student notebooks revealed that they not only produce technical drawings as specifications to control production but they also set out diagrams as an 'aide memoire' for planning their production of cloth through print or weave. Figure 8 shows a final year weave student drawing to articulate and plan her weave production process.

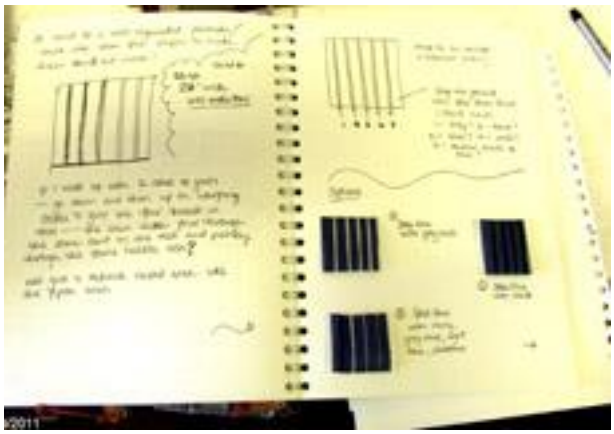

Figure 8. Planning the weave process. Jenny Newman, 2011.

Detailed mapping of the conversion of a design into a digital weave process drawn onto graph paper was also observed in the work of weavers (Figure 4), indicative of a link between a traditional form of drawing and new developments in technology. Although the use of traditional drawing has been predominantly associated with printed textiles (Collette 2010), digital technologies and new manufacturing techniques have facilitated the translation of complex images into both knitted and woven textile manufacture producing new forms of drawing that are currently being investigated by the author (McInnes and Schenk, 2011).

DISCUSION

Although, throughout the longitudinal study, it has remained evident that professional graphic designers still benefit greatly from acquiring a wide range of drawing abilities, this investigation of textile design has demonstrated a far greater reliance on drawing in that profession. It is true that graphic designers employ a range of image-making and repurposing techniques which depend on their visual literacy and image manipulation skills developed through the

experience of drawing, in addition to which the ideation phase of the design process is significantly facilitated by speedy, competent draughtsmanship. For textile designers, on the other hand, the capacity to draw in a reflexive and relevant way and to have command of extensive traditional drawing applications ranging from observation to abstraction is of paramount importance.

Developments in computer-aided design have of course greatly benefitted textile design and enhanced designer interaction with industry, but traditional drawing has not been replaced by digital drawing methods to the same extent as in the case for graphic design. Certainly, textile designers do scan archive images and digitally re-master them for their own designs, but drawing from the archive is still perceived as the best way to aid both perception and understanding, and is also effective in stimulating meaningful translations of vintage images and innovative new departures. While the use of drawing to support creative thinking is similar for both disciplines, for graphic designers the majority of the design development, evaluation, presentation and production stages are conducted in the digital environment. However, all of the textile designers whose views are represented in this study, the majority of whom are successful academics and practitioners from England and Scotland, indicated that traditional forms of drawing in traditional media are frequently involved in these later stages in the textile design process.

Respondents indicated that even in preparing for the production stages of manufacture, drawing can remain a valuable tool. The fact that the finesse needed to maximize the quality of production of a digitally operated jacquard system can be facilitated by image development in pencil as shown in Figure 4 and, again, the fact that the use of drawing for specification (Figure 7) plays a vital role in the control of production, demonstrate that traditional forms of drawing are still very relevant to the efficacy and efficiency of manufacture. Therefore, by maintaining provision for learning about a wide range of different types of drawing and drawing applications, textile design education may be seen to support the textiles industry in a very practical way.

Maintaining this broad approach to drawing education can be also seen as beneficial at a perhaps more theoretical level. Given that much imaging and design software has been developed through research into the practice of drawing, it is clear that without experiencing the ‘physical’ world of paper-based drawing students and junior designers can in fact struggle to understand many of the tasks that digital media have been developed to perform. Futhermore, as Menzes (2006) indicates, various researchers have proposed that designers can read more from a drawing than was originally intended (Schon and Wiggins1992, Suwa, Gero, Purcell 2000). An early discovery in the longitudinal study was that one of the benefits of the designerly habit of keeping drawings is the new design potential to be seen by re-reading them, or through ‘reinterpretation’, as has been described by Stones and Cassidy (2010). Therefore the reading and re-reading of drawings is an important designerly activity that can only really occur when actual drawings are produced.

Digital drawings can of course be seen on screen and in printout, and the recent study has revealed that it is established good practice on textile courses for students to compile systematic notebook records of design progression through digital printouts. Whether this has the same effect in facilitating ‘reinterpretation’ as is the case with traditional drawings is worthy of further investigation, but it may be that the ‘fixed’ nature of printout may not have the same ‘fuzzy’ potential of drawings. With the speed and efficiency needed for today’s competitive marketplace, textile students must be given time to become proficient in both specialist

textiles and imaging software, whereas, it must be said, the development of traditional drawing methods is notoriously time consuming and thus difficult to accommodate in a crowded curriculum. However, it should be also be acknowledged that truly effective drawing in a digital environment is supported by an understanding of the traditional forms of drawing that so much of the software has been designed to emulate.

Moreover it must be acknowledged that traditional drawing can be used to support the rapid flow of creative ideation in ways that digital methods cannot and that the act of drawing itself, while encouraging more profound observation, is also found to develop the visual awareness necessary to create and select in an evaluative and qualitative manner. Textile design can and indeed frequently is produced rapidly with scan, flip and paste digital applications, but the intellectual development behind true innovation and contemporary aesthetics can be seen to necessitate the complex modeling systems that only a wide range of drawing ability can support.

Time must be found on the textile curriculum to develop this range of drawing abilities if originality and quality are truly aspired to. In fact, the 2004 investigation found that among design courses in general, textile design courses 'provide the greatest concentration on drawing studies, maintaining curriculum content throughout the entire course' (Schenk 2005). However, recourse to digital technology is now much more widespread with textile students than it was then, and so the case must be made for a reappraisal of the importance of drawing in design for textile manufacture by academics with the responsibility for the development of drawing ability in their students, and for developing an understanding of the importance of drawing for design.

CONCLUSIONS

The development of visual awareness and visual literacy are vital to both textile and graphic designers and are facilitated through drawing, although the textile designer's preoccupation with decoration is not shared by the graphic designer who is more focused on communication. The traditional importance of floral design in textiles is built on drawing from observation which has no equivalent in graphic design, but both disciplines are highly dependent on copying archival or found imagery for inspiration or repurposing. However, the advantages of interpretive copying through traditional drawing methods is still acknowledged more by textile designers than graphic designers, who tend to rely on digital means for the capture and manipulation of images.

With the introduction of computers in the design studio, the use of traditional forms of drawing has been challenged but research has shown that drawing still has a significant part to play and, when used strategically and in conjunction with digital forms of image making, can provide a competitive advantage to the designer working for industry. As with graphic designers, textile designers' descriptions of their use of drawing are characteristically pragmatic but its importance is not underestimated. As one designer put it, "I regard drawing as the discipline which has held my work together over the years."

There are serious implications for design education, where the place of drawing on the curriculum has been under threat for many years. Textile design students particularly need encouragement not only to establish a personal and reflexive drawing regime but also a very realistic perception of the contributions a wide-ranging drawing competency can have on their work for industry.

FUTURE WORK

Future work is planned on the analysis of types of drawing identified by the new phase of the research and not previously investigated in the longitudinal study. Research is also being conducted on the iterative interface between drawing and manufacture for knit (McInnes and Schenk, 2011) and in a practice-based investigation for weave. A book entitled 'Drawing in the design process: Characterizing industrial and educational practice' is in preparation by the author for publication in 2013.

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